

**AMMONIA FOR USE IN MANUFACTURE OF GaN-TYPE COMPOUND
SEMICONDUCTOR AND METHOD FOR MANUFACTURING GaN-TYPE
COMPOUND SEMICONDUCTOR**

CROSS REFERENCE TO RELATED APPLICATIONS

This is a Continuation Application of U.S. *now Patent No 6,719,842*
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claiming benefit pursuant to 35 U.S.C. §119(e)(i) of
5 the filing date of Provisional Application
60/114,376 filed December 30, 1998 pursuant to 35
U.S.C. §111(b).

FIELD OF THE INVENTION

The present invention relates to ammonia for
10 use in the manufacture of a GaN-type compound
semiconductor and a method for producing a GaN-type
compound semiconductor using the ammonia.

BACKGROUND OF THE INVENTION

Fig. 3 shows an example of conventional GaN-
15 type compound semiconductor devices. The GaN-type
compound semiconductor device shown here has a
constitution such that a buffer layer 2 comprising
Ga_xAl_{1-x}N (wherein $0 \leq x \leq 1$) which is a GaN-type
compound, a Si-doped n-type Ga_xAl_{1-x}N layer (n-type